

**In the claims**

1-5 (withdrawn)

6-11 (canceled)

12. (currently amended) A method of endpoint detection in plasma etching of a target layer of material, comprising the actions of:

providing a target layer of material of which not less than 90% of the target layer surface is covered with a mask;

etching the less than 10% open area of the target layer uncovered by the mask;

measuring voltage across a plasma system by measuring a voltage across an element that is external to said plasma system;

detecting a change of the voltage prior to the completion of the etching of the target layer of material; and

stopping etch when said voltage decreases a predetermined amount within a predetermined time.

13. (original) The method of Claim 12, wherein said element is a resistor.

14. (original) The method of Claim 12, wherein said voltage is a DC voltage.

15-18. (canceled)

19. (previously added) The method of claim 12, wherein the element is part of an impedance matching network.

20. (new) The method of claim 12, wherein the not less than 90% of the target layer surface is not less than 96%.

21 (new) The method of claim 12, wherein the not less than 90% of the target layer surface is not less than 99%.